

two or three of the spatulate hooks; the latter are about half as long as the former, slender toward the base, but gradually becoming broader toward the end, which is twice as broad, obtusely rounded, and curved back from about the middle; the hooks are nearly terminal on one side, the thin margin projecting beyond them. The basal lobe of the "feet" is very small; the posterior lobe is small but prominent. Color light red to dark red, somewhat iridescent.

Length up to 350^{mm}; diameter, 0.05^{mm} to 1^{mm}.

Great Egg Harbor, New Jersey, to New Haven and Vineyard Sound.

NINOË NIGRIPES Verrill, sp. nov. (p. 508.)

Body elongated, slender, broadest a short distance behind the head, at the middle of the branchiferous segments. Head depressed, elongated, conical, blunt at end, about twice as long as broad. The branchiæ are represented on the first two setigerous segments by a short, flattened lobe, arising from the outer and posterior face of the setigerous lobe. On the two following segments the lobe is divided into two or three parts; on the fifth there are usually three, more elongated, round, and more slender branchiæ, which increase in number and length on the succeeding segments until there are five, six, or more long, slender branchial filaments, which arise from the posterior face of the setigerous lobe, and diverge, forming a somewhat fan-shaped or digitate group; about the twenty-fourth segment the number rapidly diminishes, and after the twenty-seventh or twenty-eighth there remains but one small branchial process. The setigerous lobe is prominent, obtuse, turned forward. The setæ are numerous on the branchial segments, and rather long, of various shapes, but mostly bent, with an acute lanceolate point; posteriorly they are shorter and fewer, and mostly slender, margined setæ, with hooks at the spatulate end. Body flesh-color; the setæ dark, often blackish; branchiæ bright red.

Length of broken specimens, 20^{mm}; breadth anteriorly, 2^{mm}.

Vineyard Sound and Buzzard's Bay, and waters outside; in 8 to 29 fathoms, mud.

STAUROCEPHALUS PALLIDUS Verrill, sp. nov. (p. 348.)

Body rather slender, convex above, flattened below, largest in the middle, tapering slightly toward each end, composed of about seventy segments. Head small, depressed, rounded in front; antennæ four, slender, longer than the breadth of body, the two upper ones longer and more slender than the lower ones, strongly annulated or beaded; lower ones stouter, smooth, tapering. Eyes four, dark red; the posterior pair very small, placed between the bases of the upper antennæ; the anterior pair farther apart, placed between the bases of the upper and lower antennæ. Anal cirri four, the upper pair slender and about twice as long as the lower ones. Dorsal cirri elongated, slender, more than twice as long as the setigerous lobe, absent on the first setigerous segment, very small on the

second, but well developed on the third. Setæ rather long and slender. Color pale yellow, with red blood-vessels showing through anteriorly.

Length, 50^{mm}; breadth, 2^{mm}. This species moves like a *Nereis*.

Near New Haven light-house, in sand, at low-water mark.

RHYNCHOBOLUS AMERICANUS Verrill. Plate X, figs. 45, 46. (p. 342.)

Glycera Americana Leidy, op. cit., p. 15, Pl. 11, figs. 49, 50, 1855; Ehlers, Borstenwürmer, vol. i, p. 668, Pl. 23, figs. 43-46, 1868.

Charleston, South Carolina, to Long Island Sound and Vineyard Sound. Low-water mark to 10 fathoms.

I follow Claparède in adopting *Rhynchobolus* for those species of the old genus *Glycera* which have the proboscis armed at the end with four hooks or fangs.

RHYNCHOBOLUS DIBRANCHIATUS Verrill. Plate X, figs. 43, 44. (p. 341.)

Glycera dibranchiata Ehlers, op. cit., pp. 670-702, Pl. 24, figs. 10-28, 1868.

Great Egg Harbor, New Jersey, to Long Island Sound; Vineyard Sound; and Massachusetts Bay. Low-water mark to 8 fathoms.

Ehlers has given a very full anatomical description of this species.

EONE GRACILIS Verrill, sp. nov. (p. 508.)

Body very slender, terete; surface iridescent. Head elongated, acutely conical, composed of eight distinct, rounded annulations, the basal one with a pair of minute reddish eyes; antennæ four, slender. Feet prominent, elongated, more than equal to half the diameter of the body; they are uniramous on about thirty-two segments of the anterior part of the body, and bilobed, with a small obtuse dorsal cirrus; the upper lobe is prominent, more elongated than the lower one, both cylindrical, obtusely pointed; setæ compound, in two small fascicles, long, the free part exceeding the entire length of the foot. On the posterior half of the body there is a small, slightly elevated, mammilliform upper ramus, above the base of the lower ramus, and entirely separate from it, containing two or more small, acute, dark setæ, which project but slightly; the lower ramus is deeply bilobed, the lobes elongated, round, the upper one longest, the lower one acute; on the posterior side of the base of the upper lobe there is a minute, rounded setigerous lobe, and at the junction of the two lobes, on the posterior face, there is another small setigerous lobe; the setæ are long and slender, acute, many of them curved, arranged in small fascicles.

Length, 20^{mm}; diameter less than 1^{mm}.

Off Gay Head, 19 fathoms, in soft mud.

ARICIA ORNATA Verrill, sp. nov. (p. 344.)

Body rather stout, composed of numerous very short segments, much depressed and flattened anteriorly, strongly convex beneath in the middle region, flattened above throughout; breadth nearly the same

through a large part of the length, narrowed slightly and gradually toward the posterior end, and abruptly narrowed anteriorly close to the head, which is very small, short, conical, and acute at the tip. On the anterior thirty-two setigerous segments the feet consist of a small upper ramus, having a small, tapering dorsal cirrus and a minute setigerous lobe, bearing a small fascicle of slender and short setæ, and a lower ramus, separated by a narrow space, and consisting of a small upper papilla, and a long transverse row of minute, rounded papillæ, which surmount a narrow, somewhat elevated, crest-like ridge; the first twelve or thirteen segments having shorter rows, so as to leave a broad, naked ventral space, but those farther back having rows of papillæ that nearly meet beneath, and thus entirely covering the sides and ventral surface for a short distance; these crest-like ridges bear close rows of minute, hooked setæ. The branchiæ commence on the upper surface of the fifth setigerous segment, in the form of elongated papillæ, which become more elongated and narrow ligulate farther back. Posterior to the thirty-second segment the papilliform crests of the lower ramus disappear, and the lower ramus consists of an elongated papilliform, and finally cirriform, upper process, with a minute setigerous lobe at its base, bearing fine inconspicuous setæ; and an elongated membranous basal portion, decurrent down on the lateral surface of the segment; the upper ramus is connected at the base by a membranous web with the lower one, and consists of an elongated dorsal cirrus, similar in size and shape to the branchia, and a very small setigerous lobe, bearing a small fascicle of fine setæ. The branchiæ are connected by a slight web-like basal ridge with the dorsal cirri. Thus there are three parallel rows of cirriform or slender ligulate processes along each side of the back, leaving a broad, central, naked space all along the back.

Length up to 60^{mm} or more; breadth, 4^{mm}.

Savin Rock, burrowing in sand at low-water mark, May, 1872.

ANTHOSTOMA ROBUSTUM Verrill, sp. nov. Plate XIV, fig. 76. (p. 343.)

Body large, long, stout, thickest and rounded, or but slightly depressed, anteriorly; tapering rapidly to the head; posterior portion very long, narrowing gradually to the posterior end, flatter or concave above, well rounded below, higher than wide, with three rows of long, erect, ligulate, or narrow lanceolate processes along each side of the back, the four inner rows largest; and a pair of foliaceous processes on the sides of each segment. Head short, conical, acute. Proboscis large, broad, divided into about eighteen long, narrow, digitate, and sulcated lobes, with convoluted margins, broadest at the end, and free for a large part of their length, but united at the base by a membranous web; or it might be described as divided into a lower, two lateral, and two upper main lobes, each of which is again divided into three or four digitations. During life these are all continually changing in form and length, and generally only a few of the processes are protruded at one time. Branchiæ com-

mence on the twenty-sixth setigerous segment as minute papillæ; on the twenty-eighth they become prominent and acute-conical; farther back they become long, lanceolate, thin, foliaceous, as long as the diameter of the body.

On the twenty-three anterior setigerous segments the "feet" are represented by two short, dense, fan-shaped fascicles of setæ on each side. On the twenty-fourth segment a small papilliform lobe, or ventral cirrus, appears below the lower ramus, which rapidly becomes larger on the succeeding segments, becoming quite conspicuous on the twenty-ninth segment; at about the twenty-eighth it becomes broader, and divided into three small lobes, the lowest broadest and thinnest, and a bilobed setigerous lobe is developed. At the thirtieth the ventral lobe becomes broader, somewhat foliaceous, with a rounded outline; farther back this becomes still larger and more foliaceous, with a broadly-rounded flexuous outer border, and the upper branch of the setigerous lobe becomes an elongated ligulate process, directed upward, and similar in form to the branchiæ, though smaller and more slender, but the lower branch remains small and rounded; a small fascicle of long, slender setæ arises from between them. On the twenty-seventh segment an upper cirrus appears on both the upper and lower rami, in the form of a small papilla, which becomes somewhat elongated and tapering at the twenty-ninth; that of the lower ramus continues small throughout, and much shorter than the setigerous or ventral lobes, but that of the upper ramus becomes rapidly larger, longer, and more ligulate, corresponding nearly with the branchiæ in size, form, and rate of increase. On the middle and posterior regions the upper ramus consists of this long, thin, lanceolate cirrus and a fascicle of long, slender setæ, arising from the anterior face of its base, and in length considerably exceeding the cirrus; the setæ are pale yellow. Those of the upper ramus are short anteriorly, and become decidedly longer at the twenty-eighth segment, and on the thirty-second and subsequent segments they form a long, divergent, fan-shaped fascicle; color, when living, ocher-yellow, orange-yellow, to yellowish brown, generally brighter yellow posteriorly. Usually there are two rows of brown spots along the back, and posteriorly there is a dorsal red or reddish brown line; branchiæ blood-red.

Length of large specimens up to 375^{mm} or more; breadth, 10^{mm}; ordinary specimens are about 300^{mm} long and 7^{mm} broad. Owing to the facility with which it breaks up when disturbed, it is difficult to obtain entire specimens of large size.

Great Egg Harbor, New Jersey; New Haven; Wood's Hole; in sand, at low-water.

ANTHOSTOMA FRAGILE Verrill, sp. nov. (p. 344.)

Body long and slender, composed of very numerous segments, very fragile, and prone to divide spontaneously when disturbed; thickest and sub-cylindrical anteriorly, tapering rapidly to the head; posterior part

very long and slender, tapering gradually, flattened dorsally. Head distinctly annulated, elongated conical, very acute, with the tip slender and translucent; proboscis short and broad, not extending far beyond the tip of the head, with six or more broad, convoluted, changeable lobes, which are united at the base by a broad membranous expansion. The dorsal branchiæ first appear on the sixteenth setigerous segment as small papillæ; they become well developed and long ligulate at about the twentieth, increasing somewhat in length on the segments farther back. On the first thirteen segments behind the buccal the "feet" are represented by a very small, slightly-elevated lobe, above and below, each bearing a dense fascicle, that of the lower ramus widest, but the length of the setæ about equal in both. On the fourteenth segment a small tubercle appears on both rami; on the sixteenth these become elongated and somewhat cirriform, and the setæ become considerably longer on the fifteenth segment. At about the seventeenth segment the lower ramus becomes distinctly tri-lobed, and at the twentieth four-lobed, with the setigerous lobe bifid, and the two lower lateral lobes conical, acute, and swollen at the base; while the upper ramus is long and ligulate, like the branchiæ, and the setæ are long and slender, the lower fascicle smallest. Farther back the lobes of the lower ramus become still more developed, but keep their acute conical form, and the upper ramus and setæ continue to elongate until, on the posterior part of the body, they exceed in length the diameter of the body. Anal segment oblong, sub-cylindrical, smooth, with two long filiform cirri on the upper side; color, when living, brownish orange, dull yellow, ocher, light reddish, or flesh-color, with a red median dorsal line, and sometimes with the dorsal surface tinged with red posteriorly; a narrow, light ventral line, bordered with reddish. Sometimes the upper surface is maculate with fine polygonal, whitish spots, due, perhaps, to ova contained within the body; there are sometimes two obscure brownish spots on the upper side of the head.

Length up to 125^{mm}; diameter, 3^{mm}.

Great Egg Harbor, New Jersey; New Haven; Watch Hill; Wood's Hole; in sand, between tides, and gregarious.

ANTHOSTOMA ACUTUM Verrill, sp. nov. (p. 501.)

Body long and quite slender, tapering most toward the head, and very gradually posteriorly. Head very acutely pointed, with two rather indistinct reddish spots above, resembling imperfect ocelli. The branchiæ commence at the eleventh setigerous segment as small dorsal papillæ, and become prominent on the thirteenth; on the succeeding segments they become long and ligulate. Anteriorly the feet are represented by an upper ramus, consisting of a very small tuft of setæ, with a very small papilliform lobe above it, and a lower ramus, consisting of a small prominent papilla, with a fascicle of slender setæ, much larger than the upper one. On the fourteenth and succeeding segments

the dorsal cirrus of the upper ramus becomes longer, more slender, and ligulate. On the fifteenth segment a small, short, rounded ventral cirrus appears on the lower ramus, and farther back it becomes larger and more prominent, and the setigerous lobe becomes bilobed. Anal segment rounded, obtuse; cirri long and slender. Color light red.

Length up to 40^{mm}; diameter, 2.5^{mm}.

Off Gay Head, 19 fathoms, soft mud; also from the deeper parts of Vineyard Sound.

ANTHOSTOMA, species undetermined. (p. 508.)

Another species, not well studied, was dredged in the deeper waters off Gay Head and Buzzard's Bay. It differs from all the preceding in having eighteen anterior segments without branchiæ.

NERINE AGILIS Verrill, sp. nov. (p. 346.)

Body long and rather slender, anteriorly flattened, posteriorly more rounded. Head long conical, with a slender acute tip; mouth a transverse fissure beneath; eyes four, placed in front of the bases of the two large antennæ, small, black, the anterior ones a little farther apart; antennæ long, slender, with thickened bases, placed on the dorsal surface of the head, with their bases contiguous.

The branchiæ are slender, ligulate, and exist on all the segments except the first. On the first segment the "feet" are represented on each side by two small rounded lobes, bearing very small setæ, and placed just below the bases of the antennæ; on the succeeding twenty segments the lower ramus consists of a larger, somewhat semicircular lobe, bearing a broad cluster of slender, acute setæ, and separate from the upper ramus, which consists of a thin foliaceous process joined to the branchial cirrus, but with a free terminal portion, and bearing a broad, comb-like cluster of long acute setæ, nearly as long as the branchiæ, and much longer than those of the ventral ramus. On the twenty-first setigerous segment a small papilliform ventral cirrus appears on the lower ramus, and farther back it becomes more prominent and separate from the setigerous lobe. In the middle and posterior region the free portion of the cirriform lobe of the upper ramus is longer.

Color reddish or brownish green anteriorly, light green on the sides; branchiæ bright red. Length up to 60^{mm}; breadth, 2^{mm}; length of antennæ, 12^{mm}.

Great Egg Harbor, New Jersey, on the outer beach, burrowing in sand, at low-water mark.

SCOLECOLEPIS VIRIDIS Verrill, sp. nov. (p. 345.)

Body long, slender, depressed; both the upper and lower surfaces flattened, of nearly uniform breadth throughout most of the length, abruptly narrowed at each end, and somewhat tapering and more rounded posteriorly. Head with the central plate longer than broad,

forming an acute angle behind, anteriorly suddenly expanding into a wide transverse frontal lobe, broadly rounded in front, with a slight emargination in the middle, the lateral angles prominent and slightly auriculate or recurved. Eyes four, distant, the two pairs nearly parallel. Proboscis small, smooth, rounded. Antennæ slender, twice as long as the breadth of the body. The branchiæ are slender and ligulate anteriorly, and meet over the middle of the back; but farther back they gradually decrease in length, and disappear at about the anterior third. The upper ramus of the feet consists of a broad, thin, foliaceous upper ramus, rounded outwardly, connected, for most of its length, with the branchia, the upper end a little prominent; and a broad cluster of setæ, consisting of a small upper fascicle of slender aciculæ, scarcely as long as the branchia, and a comb-like group of shorter and somewhat stouter bent and acute setæ. The lower ramus consists of a small, thin, rounded process, bearing a transverse row of acute bent setæ, and a ventral tuft of longer and more slender ones. Posteriorly the slender setæ in the dorsal and ventral tufts are considerably longer; and several stouter, recurved, two-hooked, uncinæ setæ appear in the transverse rows of acute setæ, both in the upper and lower rami. Anal segment short, truncate or suburceolate, somewhat bilobed; the margin of the orifice crenulated with small rounded lobes, and with four small conical papillæ on the upper side. Color olive-green or bright green, darker posteriorly; branchiæ bright red; antennæ light green, with a row of black specks.

Length up to 100^{mm}; breadth, 3^{mm}.

Great Egg Harbor; New Haven; Watch Hill; Wood's Hole; burrowing in sand, at low-water.

SCOLECOLEPIS TENUIS Verrill, sp. nov. (p. 345.)

Body very long and slender, depressed, especially anteriorly, gradually tapering posteriorly. Head short and broad, slightly three-lobed in front, the central lobe broadly rounded, the lateral ones also rounded, somewhat smaller. Antennæ long and slender. The branchiæ are small, ligulate, and exist only on the anterior segments. The setæ of the dorsal fascicle are long and slender; but those of the first three segments are longer than the others, forming large fan-shaped fascicles directed upward and forward; those of the first segment longest, about twice as long as the breadth of the head. Farther back the setæ of the upper ramus become shorter, the upper ones slender, capillary, the lower ones stouter, somewhat bent, mostly acute, some uncinæ. Those of the lower ramus are shorter, setiform, forming large fascicles anteriorly. Farther back the upper ones are partly stouter, somewhat bent, and acute, and partly uncinæ, while a small ventral fascicle of slender ones still remains. Posteriorly the setigerous lobes of the feet become very small. Color light green; branchiæ red, tinged with green; antennæ whitish, with a red central line.

Length, 80^{mm}; breadth, 1.25^{mm}.

Great Egg Harbor, New Jersey; burrowing in sand, at low-water.

SCOLECOLEPIS CIRRATA Malmgren. (p. 501.)

Annulata polychæta, p. 91, Pl. 9, figs. 54 A-54 D. *Nerine cirrata* Sars, Nyt. Mag., vol. vi, p. 207 (teste Malmgren).

This is a larger and stouter species than either of the preceding. The front of the head is broadly rounded, with prominent, rounded, lateral angles; the foliaceous lateral appendages are larger and much wider.

Off Block Island, in 29 fathoms, and in the deepest parts of Vineyard Sound, near the mouth; off Saint George's Bank, in 110 and 150 fathoms. Northern coasts of Europe; Spitzbergen; Greenland. In 20-250 fathoms. (Malmgren).

SPIO SETOSA Verrill, sp. nov. Plate XIV, fig. 77. (p. 344.)

Nerine coniocephala? A. Agassiz, Annals Lyceum of Nat. Hist. of New York, vol. viii, p. 333, Pl. x, figs. 39-45, 1866, (*non* Johnston.)

Body long, moderately slender, flattened dorsally, convex below, obtuse anteriorly, slightly tapered toward the posterior end. Head with a prominent median lobe, which is sub-truncate and a little turned up at the front end, with the corners a little prominent and rounded; lateral lobes shorter than the median; on the posterior part of the vertex there is a small median, conical prominence. Eyes four, on the vertex, the posterior pair nearest together; antennæ long. Branchiæ moderately long, slender, ligulate, largest on the anterior segments. On the first three or four segments the upper ramus of the feet has a slender dorsal cirrus, which disappears farther back. The setæ of the upper ramus are long, acute, and form a broad fascicle, in which the upper ones are much longer and more slender, divergent; the lower stouter and more or less bent; they are longest on the first four or five segments, the upper ones considerably exceeding the branchiæ. The lower ramus is small and but slightly elevated; on the anterior segments it bears a small fascicle of short, acute, bent setæ, much shorter than those of the upper ramus, and closely crowded together in two or more rows, with a small ventral tuft of longer and more slender setæ; farther back the acute bent setæ begin to be replaced by uncinæ setæ, which, at about the tenth segment, form a complete transverse row, parallel with a row of slightly longer, pointed setæ, while the small ventral tuft of longer acute setæ still remains, and all the setæ in the broad fascicle of the upper ramus are acute and much longer. In the middle region of the body, the uncini of the lower ramus form a close row, containing fifteen to twenty; they are strongly recurved near the end and margined.

Length up to 80^{mm}; diameter about 2.5^{mm}.

New Haven; Wood's Hole; and Naushon Island; in sand, at low-water.

This species appears to be the same as the one studied by Mr. Agassiz, though it differs slightly from his figures, one of which I have copied.

SPIO ROBUSTA Verrill, sp. nov. (p. 345.)

Body stout, broadest anteriorly, tapering posteriorly, but little depressed except anteriorly, very convex beneath, flattened above. Head broad, somewhat angular; the median lobe truncated and slightly emarginate in front; lateral lobes a little shorter, wide, obtuse in front, slightly angulated laterally; a small median, conical elevation on the posterior part of the head. Antennæ long, rather stout. Branchiæ long, narrow, tapering. Upper ramus of the feet with a small, obtuse setigerous lobe, bearing a small fascicle of short setæ, considerably shorter than the branchiæ, even on the anterior segments, and a foliaceous process arising behind the setigerous lobe, broadly rounded on its thin outer edge; the upper end free and obtusely pointed; farther back the setæ are shorter and the foliaceous process smaller and less prominent. The lower ramus on the anterior segments has a small, prominent, semicircular foliaceous process and a small, dense fascicle of short setæ, crowded in several transverse rows; on the eighth and subsequent segments the foliaceous processes become larger and wider, and the setæ more numerous, crowded, and partly uncinatè; still farther back the setæ are nearly all uncinatè, except a very small ventral tuft of slender ones, and form long, double, transverse rows, projecting but little beyond the surface. Color greenish.

Length, 50^{mm}, or more; breadth, 3^{mm} to 3.5^{mm}.

Wood's Hole and Naushon Island; in sand, at low-water mark.

POLYDORA CILIATUM Claparède(?). Plate XIV, fig. 78. (p. 345.)

A. Agassiz, On the Young Stages of a Few Annelids, in *Annals Lyceum Nat. Hist. of New York*, vol. viii, pp. 323-330, figs. 26-38, 1866 (embryology).

Naushon Island and Massachusetts Bay; in muddy sand, at about half-tide (A. Agassiz).

The adults of this species were not found by us. The young were frequently taken in the towing-nets.

A young *Polydora*, belonging perhaps to a different species, was dredged off New Haven, in 4 to 6 fathoms, shelly bottom. It was about 12^{mm} long. The color was pale yellow, with small black spots along the sides between the fascicles of setæ; a red dorsal vessel; antennæ white.

OPHELIA SIMPLEX Leidy. (p. 319.)

Marine Invert. Fauna of Rhode Island and New Jersey, p. 16, 1855.

Body short, smooth, iridescent, well rounded above, flat below; usually found coiled up, so that the extremities meet, or nearly so, and resembling in general form the larvæ of certain beetles and flies. Head very acute conical; the buccal segment suddenly enlarges; mouth beneath, with thick evertile lips, the lower one generally protruded as a large rounded lobe. Posterior end terminated by about ten unequal, round, blunt, fleshy, simple papillæ, of which the two ventral ones

are considerably longest. The setæ commence opposite the mouth and extend to the posterior end; they form two fan-shaped fascicles on each side of each segment, closely approximate at their origin, but strongly divergent, the upper ones directed upward, the lower ones downward; the setæ are very long and slender on the middle segments, those of the upper fascicles longest, and exceeding half the diameter of the body; anteriorly they are considerably shorter; they are somewhat expanded toward the base, but have long and very slender tips. Dorsal cirri rather long and stout, transparent and wrinkled, blunt at tip, thickened at base; in length nearly equaling a third of the diameter of the body. Color yellowish white, tinged with brownish on the sides.

Length, 8^{mm} to 10^{mm}; diameter, 1.5^{mm}.

Savin Rock, at half-tide. Point Judith, Rhode Island, below low-water mark (Leidy).

The specimen above described was found under stones at Savin Rock, near New Haven, May 5. Its body was completely filled, from one end to the other, with comparatively large yellowish white eggs, which show through the transparent integument of the dorsal side very distinctly.

TRAVISIA CARNEA Verill, sp. nov. (p. 508.)

Body with twenty-four setigerous segments, oblong or fusiform, very changeable, round, usually tapering abruptly to each end. Head small, conical, acute; posterior end terminated by a small, bluntly rounded, or slightly clavate papilla; setæ small and slender. Branchiæ short, slender, commencing on the third setigerous segment and ceasing at the twentieth; longest about one-fourth as long as the diameter of the body. Segments of middle region tri-annulated. Color light red or deep flesh-color; branchiæ bright red.

Length, in extension, about 25^{mm}; 3^{mm} to 4^{mm} in diameter. It can contract to 12^{mm} or less in length.

Off Gay Head, Martha's Vineyard, in 19 fathoms, soft mud.

AMMOTRYPANE FIMBRIATA Verrill, sp. nov. Plate XV, fig. 79. (p. 508.)

Body elongated, slender, smooth, thickest in advance of the middle, tapering gradually to both ends, convex, and well rounded above; lower surface with a median sulcus and rounded margins, separated from the upper surface by a deep groove. Head very acute. Eyes two, small, black. Proboscis small, sub-globular, smooth. Branchiæ long and slender. Caudal appendage spoon-shaped, deeply concave, transversely striated; the outer margin fringed with a row of small, slender papillæ; a pair of slender cirriform processes, about half its length, arises at its ventral base, and a longer single median one is generally concealed in its cavity. Setæ of the anterior segments long and slender, more than half the diameter of the body, shorter farther back. Color, when living, purplish flesh-color, shining and iridescent

on the dorsal surface; a row of elongated dark spots on each side between the fascicles of setæ; the setæ dark gray.

Length, 75^{mm}; diameter, 3^{mm}.

Off Buzzard's Bay, in 25 fathoms, mud; Bay of Fundy, 10 to 90 fathoms, mud; near Saint George's Bank, 110 and 150 fathoms, mud.

SCALIBREGMA BREVICAUDA Verrill, sp. nov. (p. 416.)

Body rather short, with a narrow, tapering anterior portion; a swollen middle region; and a narrow, tapering caudal portion; lower surface with a very narrow, smooth median area, divided transversely into a series of small rounded prominences by slight depressions. Head small, transverse, truncate or slightly concave in front, the angles produced and prominent. On the anterior region four segments bear short, tufted branchiæ, close to the base of the upper fascicles of setæ, which are rather long and slender; each of these segments also has a dorsal transverse row of rather large and conspicuous blackish granules on its posterior margin, and also a black spot on the sides below the branchiæ. The surface of all the anterior segments is regularly and rather finely granulous, the granules in transverse rows. The middle region, composed of about ten segments, is thicker, and sometimes much swollen, and the feet are represented only by small fascicles of slender setæ. The caudal region is less than one-half the entire length in preserved specimens, and is rather slender and tapering, composed of about sixteen segments; the rami of the feet consist of a prominent, obtuse papilla, both above and below, with a blackish spot at the end, and bearing a fascicle of slender setæ, in length rather exceeding half the diameter of this part of the body. Color, when living, dark brownish red, tinged with yellow at both ends.

Length, 32^{mm}; diameter, 2.5^{mm}.

Off New Haven, 4 to 6 fathoms, shelly bottom.

TROPHONIA AFFINIS Verrill. Pl. XIV, fig. 75. (p. 507.)

Siphonostomum affine Leidy, op. cit., p. 16 (148), 1855.

Body rather slender and elongated for the genus; skin irregularly rugose, granulous, anteriorly covered with small papillæ. The eight branchiæ are cylindrical, thick, blunt, unequal; two tentacles stouter than the branchiæ, sulcate beneath. On the four anterior segments the upper and lower fascicles of setæ are much elongated and directed forward. On the fifth and following segments those in the upper fascicles are capillary, divergent, six to ten in each fascicle; in the lower fascicles there are about three stout, slightly curved, acute, deep yellow setæ. On the third and fourth segments the setæ of the upper fascicles are longer and larger than those in the lower ones; posteriorly the lower setæ become longer, stouter, and more curved at the tip, the lowest one becoming hook-like.

Length, 60^{mm}; diameter, 3.5^{mm}.

Off Block Island, 29 fathoms; off Buzzard's Bay, 25 fathoms, mud. Great Egg Harbor (Leidy).

BRADA SETOSA Verrill, sp. nov. (p. 508.)

Body short, oblong, sub-cylindrical, flattened below, tapering a little toward both ends, which are obtuse; composed of seventeen setigerous segments. Skin covered with small, prominent, acute papillæ. Upper fascicles of setæ long, slender, light colored; lower fascicles larger, composed of stouter, long, dark colored setæ, surrounded at base by small cirriform appendages. Ventral cirrus small.

Length of preserved specimen, 10^{mm}; diameter, 2.5^{mm}.

Off Gay Head, 8 to 10 fathoms, among muscles, &c.

STERNASPIS FOSSOR Stimpson, Plate XIV, fig. 74. (p. 507.)

Marine Invertebrata of Grand Manan, p. 29, fig. 19, 1853.

Off Gay Head, 19 fathoms, soft mud; common in the Bay of Fundy in 10 to 90 fathoms, mud; near Saint George's Bank, 110 fathoms, sandy mud; Casco Bay, 20 fathoms.

CIRRATULUS GRANDIS Verrill, sp. nov. Plate XV, figs. 80, 81. (p. 319.)

Body large and stout, anteriorly subcylindrical, somewhat flattened and tapering slightly posteriorly, and rather abruptly tapered anteriorly. Head small, acute, with obscure brownish spots above, but apparently without distinct ocelli. Posterior end obtuse, the orifice surrounded by a thickened, slightly crenulated border. Posterior to the mouth there are about seven rather indistinct annuli (perhaps four biannulated segments) destitute of appendages; the two next segments bear two fascicles of small setæ on each side, and two crowded dorsal clusters of long slender branchial cirri; these clusters nearly meet on the dorsal line, leaving only a narrow naked space, and contain a large number of cirri, usually of various lengths, closely crowded together. Farther back the "feet" consist of small and slightly prominent upper and lower rami, connected by a slightly raised, transverse ridge; each ramus bears a small fascicle of short, slender, acute setæ, in a transverse row; and a few stouter curved spinules, which project but little from the surface; posteriorly the spinules are more numerous and the slender setæ fewer and a little longer, but they are scarcely equal to one-tenth of the diameter of the body. Along nearly the whole length of the body long slender branchial cirri arise from above most of the upper rami, but many of these are generally broken off in preserved specimens. In alcohol the lower surface of the body is generally flat or concave; the "feet" occupy an elevated lateral ridge, often separated from both the ventral and dorsal surface by a deep groove; and the dorsal surface is moderately convex. The annulations are short, very numerous, and distinct. Color, when living, dull yellow, yellowish green, yellowish orange, greenish orange to orange-brown, darkest anteriorly, and often

iridescent beneath; sides often with dark brown specks; anterior branchial cirri usually bright orange, with a red central line; lateral ones darker yellow or orange, generally with a central line of bright red, due to the blood-vessels showing through.

Length up to 150^{mm}; diameter, 5^{mm} to 7^{mm}; length of branchial cirri, 60^{mm} to 100^{mm}.

New Haven to Vineyard Sound; low-water to 6 fathoms, in sand and gravel; common.

CIRRATULUS TENUIS Verrill, sp. nov. (p. 416.)

Body slender, elongated, strongly annulated. Head conical, depressed, acute. The first four rings behind the mouth are longer than the rest, and destitute of appendages. The branchiæ and setæ commence at the fifth segment; the branchiæ form a cluster on each side, and are long and filiform; farther back and on the middle region there is usually a pair of branchial cirri on each segment, but posteriorly they become distant and irregular. Setæ long and slender in each ramus, the upper ones exceeding in length the diameter of the body on the anterior and middle regions, but becoming much shorter posteriorly. In alcohol the integument is iridescent. No eyes were detected.

Length, 40^{mm}; diameter, 1.25^{mm}.

Vineyard Sound, 6 to 12 fathoms, among compound ascidians; 23 fathoms off Martha's Vineyard.

CIRRHINEREIS FRAGILIS Quatrefages. (p. 397.)

Histoire naturelle des Annelés, vol. i, p. 464. *Cirrhatus fragilis* Leidy, op. cit., p. 147 (15), Plate 11, figs. 39-43, 1855.

Point Judith, Rhode Island, under stones at low water (Leidy). Specimens, apparently of this species, were dredged in Vineyard Sound.

NARAGANSETA CORALII Leidy. (p. 494.)

Marine Invertebrate Fauna of Rhode Island and New Jersey, p. 12 (144), Pl. 11, figs. 46-48, 1855; Quatrefages, op. cit., vol. i, p. 468.

New Haven; Watch Hill; Point Judith; in *Astrangia Danæ*.

Our largest specimen had ten pairs of cirri; the first three pairs originate from one segment, the lowest being stouter and lighter colored than the rest.

DODECACEREA, species undetermined. (p. 422.)

A species, belonging apparently to this genus, was dredged off New Haven Harbor, in shallow water, but the specimens are too young for accurate determination.

CLYMENELLA Verrill, gen. nov.

Body elongated, composed of about twenty-two segments exclusive of the cephalic and anal segments. All the segments, except the buccal and three anteanal, setigerous; they bear fascicles of slender setæ above

and series of hooks below. The anterior margin of the fourth setigerous segment is prolonged into a thin membranous collar. Proboscis swollen, longitudinally ribbed. Head with a prominent convex median plate, and with a raised border on each side and behind, the lateral and posterior lobes separated by notches. Anal segment funnel-shaped, the edge surrounded by papillæ.

CLYMENELLA TORQUATA Verrill. Plate XIV, figs. 71-73. (p. 343).

Clymene torquatus Leidy, op. cit., p. 14 (146), 1855.

Great Egg Harbor, New Jersey; New Haven; Vineyard Sound; Bay of Fundy; Saint George's Bank, &c. Low-water to 60 fathoms.

NICOMACHE DISPAR Verrill, sp. nov. (p. 512.)

Body elongated, with eighteen setigerous segments. Head elongated, sub-conical, with a small central plate, and a depressed point in front, and with low, narrow, lateral and posterior marginal lobes, separated by slight notches; on the anterior part of each lateral border there is a cluster of small, reddish brown, ocelli-like specks. Buccal lobe coalescent with the cephalic above. Proboscis swollen and plicate. The first two setigerous segments have small fascicles of slender, short setæ above, and a single uncinata seta or hook below on each side. The third segment has much longer setæ in the upper fascicles and two hooks in the lower ones. The fourth has still longer, slender setæ in the upper fascicles, and about eight hooks in each of the lower ones. In the following segments the hooks become much more numerous. There is one short, biannulated, anteanal segment, destitute of setæ. Anal segment suburceolate, as long as broad, cylindrical toward its border, which is furnished on the ventral side with one long, slender cirrus, often as long as the diameter of the anal segment, and two short lateral ones; the rest of the border has a few, mostly very small, distant, unequal, obtuse papillæ or denticulations. The anal orifice is situated at the summit of a small cone, which rises from the bottom of the funnel. The last setigerous segment is longer than the anteanal, and a little longer than any of the ten that precede it, which are all short and subequal, broader than long, those toward the posterior end deeply incised at the intervals between them. The three anterior setigerous segments are shorter than broad; the fourth is twice as long; the fifth is three times as long; the sixth is five times as long. The color, when living, was light red, translucent, with conspicuous bright red blood-vessels, and with a bright red band at about the anterior third. The largest specimen obtained was 50^{mm} long and 2.5^{mm} in diameter after preservation in alcohol. In this specimen the anal segment is long, funnel-shaped, flaring but little toward the margin, and with four or five slight transverse annulations. The buccal segment has two transverse reddish lines on each side.

Off Buzzard's Bay in 25 fathoms; fifteen miles east of Block Island in 29 fathoms, sandy mud. It forms rough tubes of sand, which are not very firm.

MALDANE ELONGATA Verrill, sp. nov. (p. 343.)

Body large and much elongated, cylindrical, obliquely truncated at both ends; with nineteen setigerous segments, those of the middle region elongated; head depressed, with its dorsal surface very oblique; median lobe low, convex, obtusely rounded in front; lateral marginal lobes, or folds, low, rounded, thickened, separated by a shallow emargination from the posterior transverse fold, which is also thickened, little elevated, and divided into two parts by a slight sulcus; from the notch between the lateral and posterior lobes of the head, a lateral oblique sulcus curves downward and backward, and joins the first of the two transverse sulci, which are strongly marked on the ventral side of the buccal segment. Anterior setigerous segments strongly biannulated; the first two are short, the length about equal to the diameter; the next two are considerably longer; and those farther back become very much elongated; the last setigerous segment is short. The segments are considerably swollen where the setæ arise, especially in the middle region. The upper setæ are long and slender, mostly about half the diameter of the body, and form rather large fascicles on most of the segments. The last segment is obliquely truncated, its posterior border surrounding the base of the large anal process, which is obliquely placed, foliaceous, obovate, with the posterior edge broadly rounded, the upper surface concave, and the margin entire. Color dark umber-brown, or reddish brown, iridescent; the swollen parts of the rings are lighter yellowish brown, or grayish brown, the dark red blood-vessels often showing through; near the bases of the setæ there are usually small dark colored specks; head and buccal lobe thickly specked with dark brown or blackish.

Length of largest specimens, 300^{mm}; diameter, 4^{mm} to 5^{mm}; more frequently about half this size.

Savin Rock, near New Haven; in sandy mud at low-water mark, forming thick tubes composed of fine mud.

RHODINE ATTENUATA Verrill, sp. nov. (p. 508.)

Body slender, elongated, with the segments strongly marked, and the first setigerous segment very long. Head elongated, depressed, obtusely rounded in front; median lobe, or ridge, broad and but little elevated, except near the front of the head, where it becomes suddenly narrowed, more convex, with well marked foveæ on each side; lateral lobes rudimentary, scarcely apparent; on the posterior part of the head there is a prominent transverse elevation. Buccal lobe confluent with the cephalic. First setigerous segment swollen anteriorly and about as broad as the head at its anterior end where the setæ arise, but narrowed and gradually attenuated backward, its total length being about eight times its diameter; second and third setigerous segments about equal, nearly twice as long as broad, swollen in the middle, the front margin of each prolonged into a sheath-like collar; the three next

segments are short and rounded, about as long as broad, much narrowed at each end, and swollen in the middle; next two about twice as long as broad; succeeding segments more elongated. Anal segment wanting in the specimens examined.

Length about 50^{mm}; diameter about 1^{mm}.

Off Gay Head, 6 to 8 fathoms; fifteen miles east of Block Island, in 29 fathoms, sandy mud.

The *Clymene urceolata* Leidy, from Great Egg Harbor, will probably be found on the New England coast, but we have not met with it. It is peculiar in having an urceolate anal segment, with a smooth margin.

AMMOCHARES, species undetermined. (p. 508.)

A species which constructs slender, flexible tubes, covered with grains of sand, regularly and curiously attached by one end in an imbricated manner, was dredged fifteen miles east of Block Island, in 29 fathoms sandy mud, and in 23 fathoms off Martha's Vineyard. The worm is very slender, flesh-color, with a red dorsal vessel, and two small, red, ocelli-like spots.

NOTOMASTUS LURIDUS Verrill, sp. nov. (p. 342.)

Body long and rather large, composed of numerous segments, nearly cylindrical when living, and tapering but little, except close to the ends. In preserved specimens the anterior region, including about ten segments, is often a little swollen and slightly larger than the rest of the body; at other times it is even more slender than the posterior region. Head small, acute. Proboscis short and broad, swollen; in full expansion nearly twice the diameter of the body, nearly smooth, dark blood-red. The segments of the anterior region are longer than broad, in extension nearly twice as long, biannulated, and each of the annuli is again annulated with several transverse, more or less irregular sulci or furrows; ten of these segments bear fascicles of slender setæ both above and below, the fascicles on the first two setigerous segments being very small, and containing few setæ. The segments following the tenth setigerous one have a small transverse row of slender uncinæ setæ above, and a longer lateral transverse row of the same kind of setæ on each side; the "feet," or setigerous lobes, are but little prominent, the upper ones being dorsal and much smaller than the lateral ones. The surface of the body is transversely wrinkled, and covered with minute, irregular reticulations, giving it a slightly granulous appearance. Color, when living, dark purplish brown, with a bluish iridescence anteriorly, and a darker median dorsal line posteriorly; minute, white, raised spots, or slight papillæ, are scattered over the surface.

Length, 150^{mm} or more; diameter, 2^{mm}.

Savin Rock, near New Haven; in muddy sand, at low-water mark.

NOTOMASTUS FILIFORMIS Verrill, sp. nov. (p. 342.)

Body very long and slender, filiform, composed of very numerous short segments. Head very changeable in form, usually long, conical, and very acutely pointed. Proboscis smooth, obovate, or trumpet-shaped, when extended, and bright red. In the anterior region there are eleven setigerous segments, which bear small fascicles of slender setæ in both rami, those in the first five longer and acutely pointed; these segments are short, biannulate; the lower fascicles of setæ are largest and fan-shaped. In the middle region the segments are about as long as broad. Color, pale red to bright red, often mottled with whitish, and more or less yellowish posteriorly.

Length, 100^{mm}; diameter, 1^{mm}.

Great Egg Harbor, low-water to one fathom, in sandy mud; New Haven; Watch Hill; Vineyard Sound.

SABELLARIA VULGARIS Verrill, sp. nov. Plate XVII, figs. 88, 88a. (p. 321.)

Body rather stout, thickest anteriorly, tapering backward to the base of the long, slender caudal appendage. Two slender, red, oral tentacles arise near the mouth, between the bases of the operculigerous lobes, and, when extended, reach beyond the bases of the opercula. A single median lanceolate process also arises between the operculigerous lobes. A deep emargination exists on the ventral side, back of the mouth; on each side of this the front margin of the segment is prolonged into a tridentate lobe, the teeth or lobes being unequal, the inner ones largest, the middle ones more slender and acute, the outer one smallest and shortest; beyond these, toward the sides, there is another small acute process; two conical processes also project forward from the lateral margins, and also a fascicle of setæ. The ciliated prehensile cirri, or tentacles, are long and slender when extended, and reach considerably beyond the opercula. The setæ composing the opercula are golden yellow; the outer circle white at base. A row of small conical papillæ surrounds the bases of the opercula. Branchiæ long, lanceolate, acute, longer than the diameter of the body. Color of body yellowish flesh-color, or pale reddish, often with two rows of brown spots along the ventral surface; operculigerous lobes whitish or grayish, specked with blackish; branchiæ reddish or yellowish, with a red central line, often with a greenish tinge, or red centered with green; tentacles pale flesh-color, sometimes purplish; opercula blackish or grayish on the anterior surface, golden yellow on the sides, white at base; caudal process pale red or flesh-color.

Length about 25^{mm}, exclusive of caudal process; 2^{mm} to 2.5^{mm} in diameter.

Great Egg Harbor, New Jersey, to New Haven and Vineyard Sound; low-water to ten fathoms; very common. Eggs are laid in May and June.

CISTENIDES GOULDII Verrill, sp. nov. Plate XVII, figs. 87, 87a. (p. 323).

Pectinaria Belgica Gould, Invertebrata of Massachusetts, 1st ed., p. 7, Plate 1, fig. 1 (tube), 1841 (not of European writers). *Pectinaria auricoma* Leidy, op. cit., p. 14 (146), 1855 (not of European writers).

Body rather stout, little curved. Head with the dorsal surface obliquely truncated, its posterior marginal fold with a smooth border. Antennæ long, tapering, acute; frontal membrane or veil semicircular, its edge divided into rather long, slender, acute papillæ, about twenty-eight in number. Cephalic setæ in two broad groups, each containing about fifteen light golden setæ, which are somewhat curved upward, with long, slender, very acute tips, those in the middle of each group much the longest. Tentacles stout, obtuse, flattened, and folded up so as to form a groove beneath. Color light red or flesh-color, handsomely mottled with dark red and blue.

Length up to 40^{mm}; diameter, 7^{mm}.

Great Egg Harbor to New Haven and Cape Cod; low-water to 10 fathoms.

This species can easily be distinguished from *C. granulatus*, which is common in the Bay of Fundy, by the cephalic setæ or spines, which are fewer, much stouter, obtuse, and darker colored in the latter.

AMPHARETE GRACILIS Malmgren. Plate XVI, fig. 83. (p. 508).

Nordiska Hafs-Annulater, Ofvers. af kongl. vet. Akad. Förh., 1865, p. 365, Plate 26, figs. 75-75D.

Body flesh-colored, greenish posteriorly, with a conspicuous red median vessel; branchiæ light sea-green.

Length, 25^{mm} to 35^{mm}; diameter, 2.5^{mm} to 3^{mm}; length of branchiæ, 6^{mm} to 9^{mm}.

Off Gay Head, 10 fathoms; off Martha's Vineyard, 23 fathoms; east of Block Island in 29 fathoms; Bay of Fundy, 10 to 90 fathoms; northern coasts of Europe, Bahusia, at Koster Island, in 130 fathoms. Our specimens differ slightly from the description and figures of Dr. Malmgren, especially in usually having but twelve uncigerous segments in the posterior region, instead of thirteen, found by him in the European specimens. This may be due to difference of age or sex. There are, however, thirteen in one of our specimens.

AMPHARETE SETOSA Verrill, sp. nov. (p. 416.)

Body rather thick anteriorly, tapering rapidly backward. Cephalic lobe acute, with a much shorter, small, lateral lobe on each side. Branchiæ eight, transversely wrinkled, rather short; in preserved specimens about equal to the breadth of the body. Palmulæ, or cephalic fascicles of setæ, short and broad, rounded, fan-shaped, the setæ being nearly equal, the ventral ones a little longer than the lateral. Fourteen segments bear small fascicles of long setæ, supported by prominent lobes at the base. The posterior region consists of about ten uncigerous seg-

ments. Anal segments small, with two long slender cirri. Color of body translucent, light yellowish green; the anterior part of the body tinged with bright blood-red, due to the circulating fluid, showing through the integument; branchiæ greenish, with a central series of white spots; setæ of the palmulæ, deep yellow.

Length about 20^{mm}; diameter, 2.5^{mm} to 3^{mm}.

Off New Haven, low-water mark to 6 fathoms, shelly. It makes rough tubes about an inch long, covered with coarse sand and mud.

AMAGE PUSILLA Verrill, sp. nov.

Body rather slender. Head obtusely rounded in front; the middle lobe small, and but little larger than the lateral. Eight slender branchiæ, about twice as long as the diameter of the body, arranged in a crowded group; two farther back than the rest; and with no apparent naked median space. Twelve of the setigerous segments bear long fascicles of slender setæ. No "palmulæ," or cephalic setæ. Tentacles numerous and slender. Two small, slender anal cirri.

Length, 12^{mm}; diameter, 1.5^{mm}.

Off New Haven, 5 to 6 fathoms; shelly bottom.

MELINNA CRISTATA Malmgren. (p. 432.)

Nordiska Hafs-Annulater, loc. cit., p. 371, Plate 20, figs. 50-50D. *Sabellides cristata* Sars, Fauna littoralis Norvegiæ, vol. ii, pp. 19, 24, Pl. 2, figs. 1-7, 1856.

Mouth of Vineyard Sound, on muddy bottoms, in the deepest water; Bay of Fundy, on muddy bottoms, in 10 to 90 fathoms; near Saint George's Bank, in 110 and 150 fathoms, mud. Off the Scandinavian coast in 40 to 200 fathoms; Greenland; Spitzbergen.

The tube is soft, flexible, slender, and covered with fine mud.

TEREBELLIDES STROËMI Sars. (p. 507.)

Beskriv. og Iakttag., p. 48, Plate 13, figs. 31, a-d (teste Malmgren); Malmgren, Nordiska Hafs-Annulater, loc. cit., p. 396, Plate 43-43D, 1865.

East of Block Island, in 29 fathoms, sandy mud; Bay of Fundy, 10 to 90 fathoms, muddy; near Saint George's Bank, 85 to 150 fathoms. Greenland, 10 to 250 fathoms; Iceland; Spitzbergen; northern coasts of Europe; Adriatic Sea.

AMPHITRITE ORNATA Verrill. Pl. XVI, fig. 82. (p. 320).

Terebella ornata Leidy, Marine Invertebrate Fauna of Rhode Island and New Jersey, loc. cit., p. 14 (146), Plate 11, figs. 44, 45 (setæ), 1855.

Great Egg Harbor, New Jersey, to New Haven and Vineyard Sound; common in sand and gravel at low-water mark.

NICOLEA SIMPLEX Verrill, sp. nov. (p. 321.)

Body elongated, swollen anteriorly, especially above, attenuated posteriorly. Head with a rather large, well rounded, or nearly circular frontal membrane, which has a smooth margin; mouth with a small

posterior fold. Tentacles very numerous, crowded, long, and slender. Branchiæ four, rather small; those of the anterior pair somewhat the larger; those of both pairs are repeatedly dichotomously divided from close to the base. The divisions are short and not very numerous, and diverge at a wide angle. Fifteen segments bear small fascicles of slender setæ, commencing at the next behind the last branchiferous segment. The third and fourth setigerous segments of the male bear small, slender lateral cirri. Ventral shields about thirteen; the first six transversely oblong, and nearly equal in width; the last seven narrowing rapidly to the last, which is acutely triangular. Color, when living, light red, or flesh-color.

Length, 35^{mm}; diameter, 3^{mm} to 4^{mm}.

New Haven to Vineyard Sound, from low-water to 6 fathoms; off Watch Hill, 4 to 6 fathoms, in tubes composed of bits of shells and grains of sand, attached to *Laminariæ*.

SCIONOPSIS Verrill, gen. nov.

Body composed of numerous segments, of which 17, following the third, bear fascicles of slender setæ, and the following ones have only small uncigerous lobes; second and third segments bear branchiæ, and have their anterior margins prolonged into membranous, collar-like expansions; that of the second forming broad, lateral lobes behind the tentacles; that of the third forming behind the branchiæ a dorsal collar or sheath, beneath which they can be retracted. Branchiæ typically four. Those of the first pair usually larger, but generally one or more are absent, and frequently the anterior ones are smallest, or those of the same pair may be unequal, owing probably to the facility with which they may break off and be reproduced; they are palmately branched and supported on elongated pedicels. Tentacles numerous and crowded.

This genus is allied more closely to *Pista* than to any other yet described, but differs in the structure of the branchiæ and character of the collar formed by the third segment.

SCIONOPSIS PALMATA Verrill, sp. nov. (p. 321.)

Body elongated; rather slender; thickened but not distinctly swollen anteriorly, tapering gradually to the posterior end. The setigerous feet commence at the fourth segment, or next behind the branchial collar, and are all quite prominent, the first three or four being a little smaller than the rest; the setæ are rather long. The uncigerous feet commence on the second setigerous segment. Behind the last setigerous segment the uncigerous feet are smaller, somewhat prominent, and extend to the anal segment. Ventral shields about 20; the most anterior ones are transversely oblong; the succeeding ones squarish, gradually tapering to the last, which are very narrow. Anal segment tapering; its orifice with a crenulated margin. Branchiæ large, with numerous palmate divisions